

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

INVENSENSE, INC.,

Plaintiff,

v.

STMICROELECTRONICS, INC. and  
DOES 1 through 10, inclusive,

Defendants.

Civil Action No. 2:13-cv-405

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff InvenSense, Inc. (“InvenSense”), for its complaint against Defendants STMicroelectronics, Inc. (“STI”) and DOES 1 through 10, alleges as follows:

**INTRODUCTION**

1. InvenSense has instituted the present action against the Defendants identified herein to prevent the unfair and unlawful exploitation of its intellectual property. InvenSense seeks an injunction against Defendants’ unlawful conduct, as well as an award of its actual damages and attorneys’ fees as provided by law.

2. InvenSense develops and sells revolutionary micro-electro-mechanical system (“MEMS”) devices, which incorporate motion sensors, such as accelerometers and gyroscopes, with mixed-signal integrated circuits and proprietary algorithms and firmware that intelligently calibrate, process and synthesize sensor output for use within larger products. InvenSense’s gyroscopes are included in consumer products made and sold by InvenSense’s more than one hundred and thirty customers, including handheld gaming devices, smart phones and tablets, digital still and video cameras, digital television and set-top box remote controls, toys, navigation devices, and other consumer electronics devices.

3. InvenSense is a Delaware corporation with its principal place of business at 1197 Borregas Avenue, Sunnyvale, CA 94089. Founded in 2003, and taken public in 2011, InvenSense has been recognized as “dominat[ing] the 3-axis gyroscope market for [] original equipment manufacturers....” InvenSense is a pioneer and global market leader in motion interface devices that detect and track an object’s motion in three-dimensional space. InvenSense employs over 260 people, with engineering design teams and management employed in the United States of America.

4. Upon information and belief, STI is a Delaware corporation with its principal place of business at 750 Canyon Drive, Coppell, TX 75019. Upon information and belief, STI is a wholly owned subsidiary of STMicroelectronics NV (“STNV”) a company incorporated in The Netherlands, with its Analog, MEMS and Sensors Group business primarily located in Italy. As of December 31, 2012, STNV reported that less than 3% of total employees are employed in the United States of America and the remaining 97% of employees are located in Asia, Europe and the Mediterranean area. Upon information and belief, the vast majority of STI’s employees in the United States do not perform research and development, but serve primarily sales-related and customer support roles related to products designed and manufactured in Asia and Europe. STI’s registered agent for service of process is The Corporation Trust Company, located at Corporation Trust Center, 1209 Orange St., Wilmington, DE 19801, (302) 658-7581.

5. InvenSense is ignorant of the true names and capacities of Defendants sued herein as Does 1 through 10, inclusive, and therefore sues said Defendants by such fictitious names. InvenSense will amend this Complaint, if necessary, to allege their true names and capacities when ascertained.

### **JURISDICTION AND VENUE**

6. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§1331 and 1338(a), (b) because this action arises under the patent laws of the United States of America.

7. Venue is proper in this judicial district pursuant to 28 U.S.C. §§1391(b), (c) and 1400(b) as defendants have invoked the benefits and protections of this court by purposefully bringing litigation within this district, committed acts of patent infringement in this judicial district, and, upon information and belief, continue to commit such acts in this judicial district, entitling InvenSense to relief as set forth below.

### **FACTUAL ALLEGATIONS**

8. In its decade-long history, InvenSense has developed a reputation for cutting-edge innovation.

9. From its founding in 2003, through 2005, InvenSense developed and refined its groundbreaking manufacturing platform, the patented “Nasiri-Fabrication” platform.

10. In 2006, InvenSense introduced the world’s first integrated MEMS dual axis gyroscope. In 2007, InvenSense’s IDG-1000 was chosen for image stabilization in the world’s first Blu-Ray disc camcorders.

11. In 2008, InvenSense’s IDG-1100 became the smallest-foot-print integrated dual-axis gyroscope and the IDG-600™ was featured in the Nintendo Wii MotionPlus™ accessory.

12. STI did not enter the consumer MEMS gyroscope market until 2008, when STI attempted to catch up to InvenSense in the growing consumer electronics market.

13. In 2009, InvenSense introduced the world’s first dual-axis MEMS gyroscopes for 3D remote controls and PC mice and the world’s first single chip 3-axis digital gyroscope available for under \$3.

14. STI did not introduce a two-axis gyroscope for the consumer electronics market

until 2009.

15. In 2010, InvenSense unveiled the world's first Motion Processing Unit™ (“MPU”) with a digital 3-axis gyroscope and sensor fusion. InvenSense also announced the world's first MotionProcessor™ with an integrated 3-axis gyroscope, 3-axis accelerometer and 9-axis MotionFusion™.

16. In 2010, STI introduced its first 3-axis gyroscope for the consumer electronics market, while InvenSense's patent application on this technology was pending.

17. In 2011, InvenSense introduced its world's first MotionApps™ platform for embedded system developers.

18. In 2012, InvenSense introduced the world's first fully integrated 9-axis MotionTracking device for mobile devices including smartphones, tablets, game controllers and wearable sensors. InvenSense's 9-axis device includes gyroscope, accelerometer and compass functions.

19. And in 2013, InvenSense has continued its ground-breaking innovation by introducing the world's lowest profile 6-axis MotionTracking™ device, the world's lowest power 9-axis MotionTracking™ device, and many other innovative products.

20. The total market size for motion processors is expected to grow to 1.4 billion units by 2014. And shipments of gyroscopes for smartphones are expected to grow from approximately 49 million units in 2010 to over 358 million units by 2014.

21. In this growing market, InvenSense seeks to protect the unlawful and unauthorized exploitation and use of its innovative patented technology through the claims set forth herein.

**FIRST CLAIM FOR RELIEF**

(Infringement of U.S. Patent No. 8,347,717)  
(Against All Defendants)

22. InvenSense incorporates by reference paragraphs 1 through 21 above.

23. On January 8, 2013, United States Patent No. 8,347,717 (the ‘717 patent) was duly and legally issued for an invention entitled: “Extension-Mode Angular Velocity Sensor.” InvenSense is the assignee of the ‘717 patent and continues to hold all rights and interest in the ‘717 patent. A copy of the ‘717 patent is attached hereto as **Exhibit A**.

24. Defendants have directly infringed and continue to directly infringe at least claim 1 of the ‘717 patent through their manufacture, use, sale, importation and/or offer for sale of unlicensed products including, but not limited to, LSM330DLC, LSM330, L3G4200D, and A3G4250D. InvenSense anticipates that additional infringing products will be found and will duly accuse such products as discovery progresses. Defendants advertisements and marketing materials, including but not limited to internet websites and product data sheets, encourage customers to infringe the ‘717 patent through use, sale, offers for sale, and/or importation of products incorporating the identified products. The identified products are especially made or especially adapted for incorporation in a patented device or apparatus and for use in a manner that infringes the ‘717 patent, are not staple articles or commodities of commerce, and are not suitable for substantial noninfringing use.

25. An exemplary figure, i.e., FIG. 1a, of the ‘717 patent is reproduced below along with Figure 4 of STI’s Technical Article TA0343, titled “Everything about STMicroelectronics’ 3-axis digital MEMS gyroscopes” and dated July 2011, illustrating at least one manner in which STI is infringing InvenSense’s ‘717 patent:

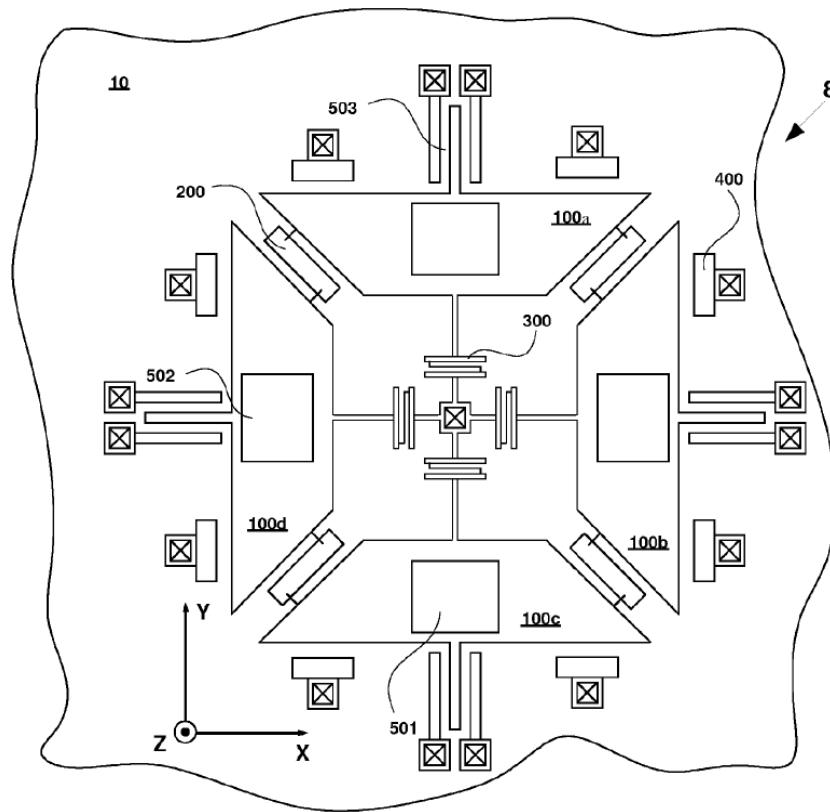


FIG. 1a

Figure 4. Demonstration of single driving mass

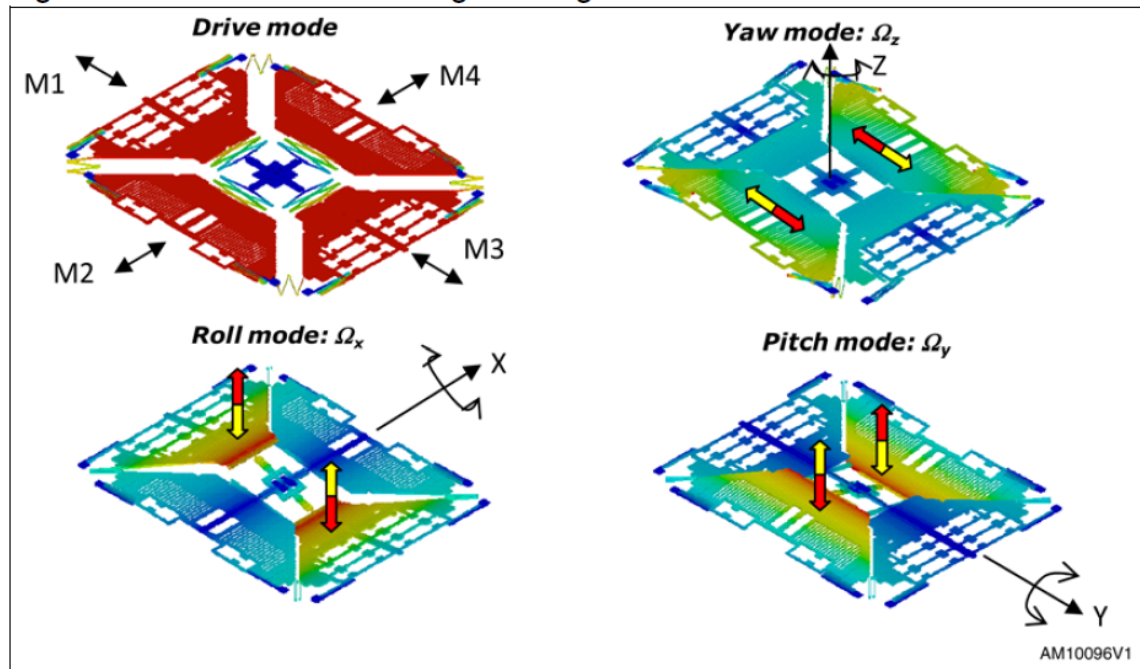


Figure 4 shows how the beating heart structure works.

26. Defendants' infringement of the '717 patent has caused and continues to cause damage to InvenSense in an amount to be determined at trial.

27. Defendants' infringement as herein alleged will continue to cause immediate and irreparable harm to InvenSense for which there is no adequate remedy at law, unless this Court enjoins and restrains such activities.

28. Defendants are liable to InvenSense for infringement of the '717 patent pursuant to 35 U.S.C. §271.

### **SECOND CLAIM FOR RELIEF**

(Infringement of U.S. Patent No. 8,351,773)  
(Against All Defendants)

29. InvenSense incorporates by reference paragraphs 1 through 21 above.

30. On January 8, 2013, United States Patent No. 8,351,773 (the '773 patent) was duly and legally issued for an invention entitled: "Motion Sensing and Processing on Mobile Devices." InvenSense is the assignee of the '773 patent and continues to hold all rights and interest in the '773 patent. A copy of the '773 patent is attached hereto as **Exhibit B**.

31. Defendants have directly infringed and continue to directly infringe at least claim 1 of the '773 patent through their manufacture, use, sale, importation and/or offer for sale of unlicensed products including, but not limited to, LSM330. InvenSense anticipates that additional infringing products will be found and will duly accuse such products as discovery progresses. Defendants advertisements and marketing materials, including but not limited to internet websites and product data sheets, encourage customers to infringe the '773 patent through use, sale, offers for sale, and/or importation of products incorporating the identified products. The identified products are especially made or especially adapted for incorporation in a patented device or apparatus and for use in a manner that infringes the '773 patent, are not

staple articles or commodities of commerce, and are not suitable for substantial noninfringing use.

32. Defendants' infringement of the '773 patent has caused and continues to cause damage to InvenSense in an amount to be determined at trial.

33. Defendants' infringement as herein alleged will continue to cause immediate and irreparable harm to InvenSense for which there is no adequate remedy at law, unless this Court enjoins and restrains such activities.

34. Defendants are liable to InvenSense for infringement of the '773 patent pursuant to 35 U.S.C. §271.

### **THIRD CLAIM FOR RELIEF**

(Infringement of U.S. Patent No. 8,250,921)  
(Against All Defendants)

35. InvenSense incorporates by reference paragraphs 1 through 21 above.

36. On August 28, 2012, United States Patent No. 8,250,921 (the '921 patent) was duly and legally issued for an invention entitled: "Integrated Motion Processing Unit (MPU) With MEMS Inertial Sensing and Embedded Digital Electronics." InvenSense is the assignee of the '921 patent and continues to hold all rights and interest in the '921 patent. A copy of the '921 patent is attached hereto as **Exhibit C**.

37. Defendants have directly infringed and continue to directly infringe at least claim 1 of the '921 patent through their manufacture, use, sale, importation and/or offer for sale of unlicensed products including, but not limited to, LSM330. InvenSense anticipates that additional infringing products will be found and will duly accuse such products as discovery progresses. Defendants advertisements and marketing materials, including but not limited to internet websites and product data sheets, encourage customers to infringe the '921 patent



through use, sale, offers for sale, and/or importation of products incorporating the identified products. The identified products are especially made or especially adapted for incorporation in a patented device or apparatus and for use in a manner that infringes the '921 patent, are not staple articles or commodities of commerce, and are not suitable for substantial noninfringing use.

38. Defendants' infringement of the '921 patent has caused and continues to cause damage to InvenSense in an amount to be determined at trial.

39. Defendants' infringement as herein alleged will continue to cause immediate and irreparable harm to InvenSense for which there is no adequate remedy at law, unless this Court enjoins and restrains such activities.

40. Defendants are liable to InvenSense for infringement of the '921 patent pursuant to 35 U.S.C. §271.

### **PRAYER FOR RELIEF**

WHEREFORE, InvenSense prays for the following relief:

1. That judgment be entered in favor of InvenSense that the accused Defendants have infringed and are infringing the '717, '773, and '921 patents in violation of 35 U.S.C. §271;
2. That InvenSense be granted an accounting of all damages sustained as a result of the Defendants' infringement of InvenSense's patents as herein alleged;
3. That InvenSense be awarded actual damages with prejudgment interest according to proof, and enhanced damages pursuant to 35 U.S.C. § 284 and as provided by law;
4. That a permanent injunction be issued pursuant to 35 U.S.C. §283 enjoining the Defendants, their officers, agents, servants, employees and all other persons acting in concert or participation with them from further infringement of InvenSense's patents;

5. That this case be decreed an “exceptional case” within the meaning of 35 U.S.C. §285, and that reasonable attorneys’ fees, expenses, and costs be awarded to InvenSense; and
6. That InvenSense be awarded such further relief as the Court deems just and proper.

**DEMAND FOR JURY TRIAL**

InvenSense hereby demands a jury trial as to all issues triable to a jury.

Dated: May 14, 2013

Respectfully submitted,  
TUROCY & WATSON LLP

By: /s/ Andrew T. Oliver

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ATTORNEYS FOR PLAINTIFF  
INVENSENSE, INC.

**CERTIFICATE OF SERVICE**

I hereby certify that on May 14, 2013, I electronically filed the foregoing document with the clerk of the court for the U.S. District Court, Eastern District of Texas, Marshall Division, using the electronic case filing system of the court. The electronic case filing system sent a “Notice of Electronic Filing” to the attorneys of record who have consented in writing to accept this Notice as service of this document by electronic means.

/s/ Andrew T. Oliver

Andrew T. Oliver